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United States Patent [19] Kim

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- [54] **CENTER-FED MULTIFILAR HELIX ANTENNA**
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- [73] Assignee: **The United States of America as represented by the Secretary of the Navy**, Washington, D.C.
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- [58] Field of Search 343/895, 890, 891, 893, 343/850, 853, 857, 858, 859; H01Q 1/36
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[57] ABSTRACT

An antenna system including a phasing circuit for producing balanced, phase displaced, signals for connection to an antenna. The antenna comprises, for each set of balanced phase signals, a pair of antenna elements disposed serially along a helical path. A transmission line, connected to each of the phasing circuit terminals, drives each antenna element pair at a center location by being connected to the proximate ends of each pair. The antenna has a omnidirectional radiation pattern, a wide band width, a good front-to-back ratio and can be constructed in a compact form.

12 Claims, 3 Drawing Sheets

